Wile (W.C.)

SURGICAL NOTES

FROM THE

CASE BOOK

OF A

GENERAL PRACTITIONER.

BY WILLIAM C. WILE, M. D..

OF SANDY HOOK, CONN.,

Editor and Publisher of the "New England Medical Monthly."

REPRINT FROM THE

New England Medical Monthly,

JULY, 1885.

SURGICAL NOTES FROM THE CASE-BOOK OF A GENERAL PRACTITIONER.

BY WILLIAM C. WILE, M. D., SANDY HOOK, CONN.

Read before the Connecticut Medical Society, May 28th, 1885.

IN presenting the following cases, from my private practice, for your consideration to-day, I am influenced by a threefold motive.

First. Because the cases *are* of real interest, and deserve a public record.

Second. Because they illustrate, forcibly, that the general practitioner *may* perform important capital operations, with the ordinary degree of success, quite as well as the specialist; and,

Third. Because I believe it to be the duty of every member of this Society, to present to its members, for their consideration, any cases which may prove of value in a clinical sense, as well as to add to the interest of the annual volume of transactions.

At the outset, let me say that I am a firm believer in a modified form of Listerism, and most of the following operations were performed under antiseptic precautions. While all the details of Listerism were not carried out, yet the strictest attention was paid to details; the preparation of the patient, cleanliness, and the spray. The latter was not played upon the wound or the patient but, rather, made to fill the room with a thoroughly antiseptic atmosphere.

Using this method, I have performed in three years, seventy-nine capital operations with but four deaths. They were a case of total extirpation of the uterus, vaginal method, for carcinoma; an exsection of the hip joint; an amputation at the elbow,—railroad accident from train; and an ovariotomy. I desire, here, to acknowledge my indebtedness to Dr. A. W. Leighton, of New Haven, for the elegant drawings accompanying this paper, most of which were taken from life, and, in some instances, during the operation.

A SEVERE CASE OF TRAUMATIC TETANUS. RECOVERY.

Cases of tetanus, of any character whatever, which recover, are of exceeding interest to the general practitioner, and when they approach in severity the following one, and then get well, the therapeutics of that case are eagerly scanned and stored up for future use. In an active practice of nearly fifteen years, I have never met with a case of the same degree of severity, as the one herein recorded. After the second visit, it did seem that it could not terminate otherwise than fatally, and, this idea alone, prompted me to use the heroic measures which were, subsequently, adopted.

While the medicines used are not new to the profession, still, I think that the doses are phenomenal, and I attribute to their size the recovery of my patient.

Frank N——, a resident of Newtown, Conn., 21 years of age, unmarried, American, sent for me on the night of February 13th. The messenger informed me that he was having fits, and that some of the family thought that he might have taken an overdose of laudanum. As you may well imagine, I went as quickly as possible. On my arrival at the bedside of the patient, I found him perfectly conscious, but suffering, as he informed me, from inward chills, and his attendants said that he had had a number of ill-defined convulsions. On making inquiry as

to the history of the case, I learned, that on the week previous he had cut his knee immediately over the patella, with an axe, that the wound had healed entirely, and that there was, at this time, no evidence of the injury, save a well-formed cicatrix. For a few days previous to my visit, he had complained of pains, more or less severe, in the limbs and the various muscles of the body, creeping chilly sensations up and down the spine, with quite pronounced chills at night. His head had ached, more or less, he had had hot flashes alternating with chilly sensations, and, finally, pronounced muscular pains all over the body. His temperature at this time was $101\frac{2}{10}^{\circ}$, his pulse 120, full and bounding. After a careful examination of the case the theory of opium poisoning was abandoned, for the obvious reason that none of the symptoms of that condition were present, and I was inclined to doubt the theory of convulsions, on the ground that there was not present at the time of the examination, sufficient evidence of that degree of exhaustion which we would be very likely to find after a case of the kind described by the patient's friends. He was rational and answered all my questions correctly and promptly. After waiting a reasonable length of time for the return of the fits, as described, and none appearing, I made a diagnosis of a probable moderate congestive chill,—the locality where he resided, being particularly malarious. I gave directions to have him take an eighth of a grain of morphia every two hours, to quiet his nervousness and overcome his alarm, and ordered him an enema, consisting of an ounce each of senna leaves and epsom salts, steeped twenty minutes in a quart of hot water, to unload his bowels. I also ordered him to commence taking two grains of quinine every two hours on the following morning, and left him with a promise to see him some time during the next day. Professional engagements, however, over which I had no control, prevented me from seeing him at all on the 14th, but as I was on my way to his residence, early the morning of the 15th, I met a messenger coming for me, who informed me that the patient was very much worse, and urged me to be as expeditious as possible. In a few minutes I was at his house. On entering his room I found four men trying to hold him in bed. He was in convulsions, passing from one to another with great rapidity. They were of the most frightful character I have ever witnessed. The oposthotonos was perfect, the weight of the body resting upon the occiput and heels, the contour of the body making a perfect bow. The convulsions followed each other with great rapidity, repeating themselves again and again, until it did seem as though exhausted nature would succumb. Sitting down by his bed-side I administered some chloroform from a napkin, and, after some little effort, succeeded in getting him under its influence, but it was only when fully anæsthetized, that the convulsions ceased. I stayed with him about two hours, and by watching him closely, and giving the chloroform liberally, I was enabled to keep the convulsions fairly under control. On leaving him I ordered the morphia in ½ grain doses, and, directing that the chloroform should be continued whenever the convulsions returned, I promised to see him early in the evening, and, if necessary, stay all night with him. At about 8 o'clock P. M. I visited him again. From information gained from the friends, I found that he had been easy only at short intervals during the day, and then, only when under the influence of the chloroform. The repeated and large doses of morphia, seemingly, had no effect whatever. On entering his bedroom I found him in a most distressing convulsion, which I cut short by a very free and prompt administration of the chloroform. After getting him quiet, I gave him sixty grains of chloral hydrate mixed with sugar and water. This he retained well, and in the course of

twenty minutes I became satisfied that there was an improvement in his condition. Another convulsion threatening at this time, I administered another dose of the same remedy and of the same size. After this he became quiet and did not have another convulsion for two hours. Being compelled to see another urgent case, I left him with directions to give a like dose every half hour or every twenty minutes, in the event of the return of the convulsions. This was the only medicine that was given after this,—the morphia being stopped,—except that the chloroform was administered to help the chloral when it would not control the convulsions sufficiently.

In the meantime the bowels had been thoroughly unloaded with the enema, and the skin was in a little better condition, his pulse, however, was 144, and his temperature was 104°, Fahrenheit. It is estimated by his friends, and I do not doubt it myself, that he had had from seventy five to one hundred convulsions in the previous twenty-four hours. During that time a marked redness appeared at the edges of the cicatrix on the knee, and did not disappear till convalescence was fully established. For several days the convulsions returned many times, but under the continued administration of the chloral in large doses, they became less and less severe, and less and less frequent, until the 20th day of February, when they ceased entirely. The chloral was given every two, three or four hours, during all this time, the whole amount consumed being six ounces and a half, besides the administration, by inhalation, of two pounds and a half of chloroform. After the 20th, he was put upon large doses of the bromide of potassium, a full dose,—sixty grains of the chloral being given at bed time, in order to insure a good night's rest. Soon after the convulsions ceased, he commenced to have a ravenous appetite, which it was exceedingly difficult to satisfy without interfering with his digestion. The patient, seemingly, made an excellent recovery, and on Friday, the 27th day of February, I made what I supposed to be my last visit, leaving him in most excellent spirits and complaining only of muscular soreness. I cautioned him against leaving his room or going out doors for a week; impressed upon him the necessity of great care in his diet, and the avoidance of undue excitement. Two days afterwards, (Sunday), he insisted upon being taken to his home, about a mile distant, and upon his arrival there made a very hearty supper of indigestible food, winding up with some cake which had been fried in grease. The result was, that before midnight he had a relapse of his trouble, and before I saw him the following morning at 6 o'clock, had had thirty-one consecutive convulsions. He was immediately put upon the old treatment, the chloral administered in large and repeated doses, and, after a long and severe illness, suffering two or three relapses, he finally, after the expiration of seven weeks, entirely recovered. His nervous system long showed very prominently the terrible ordeal through which it had passed, and for a time exhibited all the evidences of that nervous trouble so rare in the male—hysteria.

HERNIOTOMY AT 79.—RECOVERY.

The 16th of September, 1880, I received a note from my esteemed friend, Dr. A. L. Williams, of Brookfield, informing me that he had a case of strangulated hernia, which he had failed to reduce, desiring my assistance, and requesting me, if necessary, to operate. Taking Dr. L. N. Wilcoxson, then residing in Newtown, but now of New Haven, in the carriage with me, and prepared with the necessary instruments, I at once repaired to the house of the patient, where I found Dr. Williams awaiting me. The doctor very kindly gave me the following history: Michael M——, aged 79; had for a number of years been suffering from a large inguinal hernia of the right side. He had worn no truss, had made no special effort to keep it in place,

and though several times it had caused him annoyance, and a little sickness at the stomach, due to incipient strangulation, still he had been able to reduce it himself, up to this time. Twenty-four hours before my arrival, however, it became strangulated. After a prolonged effort on his part to reduce it, and failing in the attempt, he sent for Dr. Williams, who, between that time and the hour of my visit, made every attempt to reduce the strangulation by taxis. Upon examination I found all the evidences of strangulation, in a well nourished Irishman who seemed to be suffering considerably from prostration, induced by his condition. I advised that he should be placed under the influence of an anæsthetic and while in that condition, taxis performed; failing in the attempt, that the sac should be aspirated, and if that also failed, that herniotomy should be performed.

These alternatives being laid before the patient and his family, they decided to leave the matter entirely in our hands. The patient was placed under the influence of ether by Dr. Wilcoxson, and while deeply anæsthetized, both Dr. Williams and myself made earnest efforts at taxis, but without avail. A fine aspiratory needle was then pushed into the sac and a considerable amount of fluid and gas withdrawn, taxis was then again applied, but without success. I then performed herniotomy in the usual manner, breaking down the adhesions, which were strong and abundant, opening the sac, and with considerable difficulty, returning it to the abdominal cavity. The patient was under the influence of the anæsthetic about an hour altogether. He rallied from the operation nicely, and made a rapid recovery without a single untoward symptom.

The after treatment was conducted entirely by Dr. Williams, who deserves great credit for his skill, as I did not see the case again until he walked into my office a month later.

The result of the operation was all that could be desired, and though the case was an exceedingly unfavorable one, it taught me the important lesson, that even people of extreme age undergo formidable operations, and recover from grave conditions without any special constitutional manifestations.

AMPUTATION NEAR THE SHOULDER JOINT, FOR GANGRENE FOLLOWING ERYSIPELAS.—RECOVERY.

April 26th, 1883, I received a message from my friend, Dr. Hill, of Stepney, telling me to appoint the time, to see a case of gangrene of the arm in a negro who would, probably, require surgical aid. I appointed the following morning at 10 o'clock, to meet Dr. Hill, which I did, at the residence of the patient, and obtained the following history:

J. M——, negro, 29 years of age, was suddenly taken ill about three weeks previously, with all the symptoms of malaria. On account of the color of the patient, it was impossible to find any discoloration or eruption which would lead the doctor to suppose that it was what it subsequently turned out to be, a case of erysipelas, and the doctor's first question to me on my arrival, was, "how would you diagnosticate a case of erysipelas in a negro in its early stages?" I confessed to him I did not know, and I confess now I do not know. In about a week from the beginning of the attack, abscesses appeared along the inner and outer surfaces of the arm, fore-arm and hand, which was the first indication that the doctor had that he was dealing with a case of erysipelas. This condition went on from bad to worse, till it involved the whole of the cellular tissue of the arm, fore-arm and hand. Large abscesses formed over the pectoral muscles, until, at the time when I saw him, the arm and side presented the most frightful mass of putrid flesh and decomposed tissue that it has ever been my privilege to see attached to

the living human body. The patient was anæmic, exhausted with long suffering, no appetite, constipated bowels, a high temperature and a weak and rapid pulse. Prominent signs of dissolution were present, and I must confess that it was one of the most unpromising cases upon which I was ever called to operate. Nothing could be done for the patient save an operation at or near the shoulder joint, and even then it seemed like sacrilege to operate upon a man who was, apparently, so nearly exhausted. After a long and earnest consultation with the doctor, we decided to give the patient the only chance we could see for his life. He was given a large dose of whiskey, after which Dr. Hill put him under the influence of ether.

When the patient was fully anæsthetized, I performed a double-flap operation, amputating 1½ inches below the shoulder joint. It was a difficult matter to obtain sound cutaneous flap, as a large portion of the muscles of the arm were fully exposed, the skin having sloughed away, leaving but a scanty pattern for a stump. After the limb was severed I cleaned the wound with a strong solution of carbolic acid, (one to twenty), inserted a drainage tube, and brought together the flaps, as well as could be done under the circumstances. An incision was then made through the connective tissue from the axilla down to the ilium, seven inches and a half deep, evacuating quantities of pus. The cavities thus opened were thoroughly cleaned out with a strong solution of carbolic acid, and the wound left to heal from the bottom by granulation. The operation lasted about half an hour, and the patient rallied from the effects of it very slowly and imperfectly. After a very tedious convalescence, however, he finally recovered with a most excellent stump.

I saw the case only once during the after treatment, and the result is due, largely, to the care, skill and fidelity with which Dr. Hill conducted it.

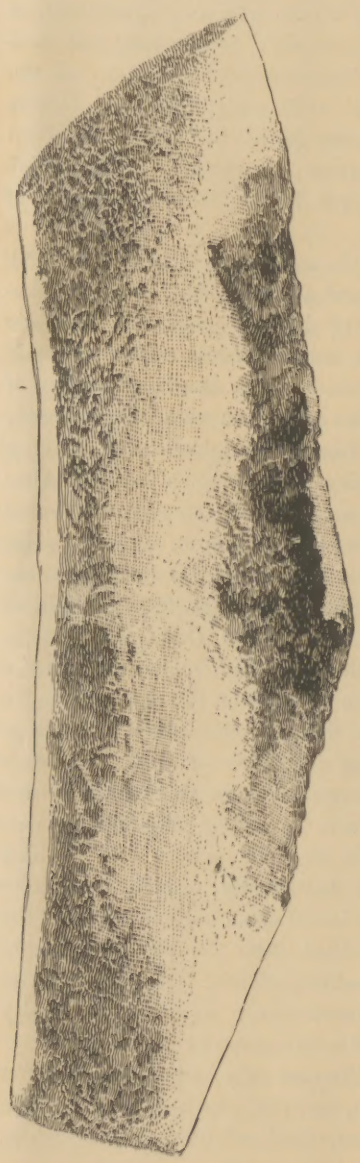
EXSECTION OF THE ENTIRE SHAFT OF THE TIBIA FOR NECROSIS, WITH REPRODUCTION OF THE BONE.—RECOVERY.

May 8th, 1883, I was consulted by the parents of Willie W——, in relation to a running sore on the shin of his left leg. On external examination I found three openings leading through sinuses, which were found to lead to dead bone. The tibia was much enlarged and the boy showed a decided limp in his gait. He suffered considerable pain, especially at night, which had been controlled chiefly by anodynes. The boy was 12 years old, with hereditary scrofulous tendencies, and had the history of a fall, striking his shin violently against the iron rail of a railroad crossing, causing, at the time, quite a severe contusion, which was followed by considerable inflammation. Soon after the bone commenced to enlarge, and had continued to increase in size up to the date of my first visit. The sinuses had opened about a year before, and continued to discharge ever since. The boy's general health was poor, he giving every evidence of the exhausting character of the discharges, and it was quite evident that the injuries he had received three years previously had lit up an inflammation of the periosteum which had led to grave destruction of bone tissue. It was also quite evident that if the impairment of the general health was allowed to go on, the result could not be other than death, and the struggle, apparently, could not be a long one. I advised operative interference, of exactly what character, however, it would be hard for me to say, until after an exploratory incision had been made. The family consenting, I put the boy upon a month's preparatory treatment, getting the secretions in perfect order, building up the general health with cod liver oil, iron, tonics and liberal diet. On the 11th of May, with the assistance of Dr. J. J. Berry, of South Norwalk, who kindly administered the ether, and Dr. S. T. De La Mater, of Bridgeport, I made

an incision along the line of the tibia, down to the bone. Cutting through the diseased periosteum and carefully lifting it away, I found the bone to be badly diseased, so much so that after consultations with the two physicians it was decided to remove the entire shaft. The condition of the bone will be seen by consulting Fig. 1, which represents it as removed. Fig. 2. represents the same bone sawn through longitudinally. In its removal I was particularly careful not to injure the periosteum, peeling it up cautiously, and, as nearly as possible, keeping it intact. After removing the shaft, a considerable quantity of diseased bone, at each end, was removed with the gouge. After this was all removed, I packed the cavity with absorbent cotton moistened with a solution of carbolic acid, (one to twenty). The

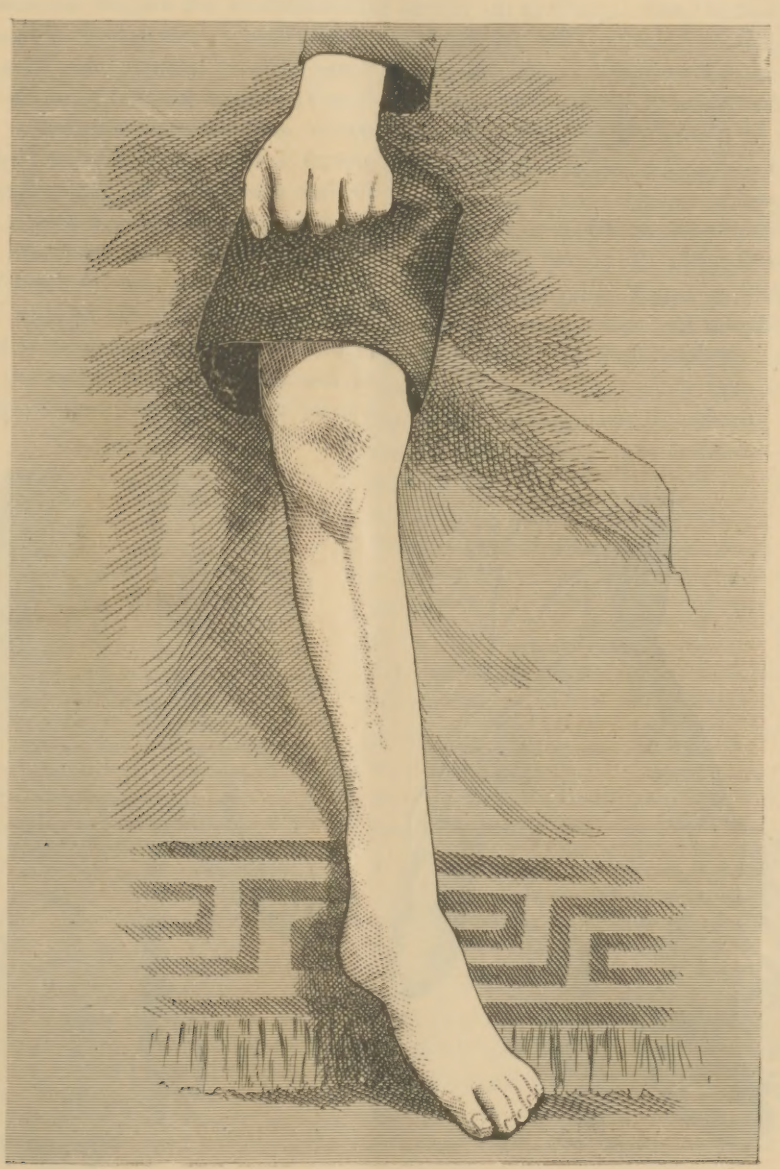
Fig. 1.

Fig. 2.



boy rallied nicely from the operation and under the influence of the same treatment that was pursued in the preparation of the case, healthy granulations sprang up and there was soon evidence of the production of new bone. After two months, the new shaft was strong enough to allow the fitting of the shoe to which were attached braces at the side, with the joints at the ankle, the upper ends of which grasped the limb just below the knee, by a steel padded band. By this time the external wound had healed, and the boy was put upon crutches. From this time out, the progress was uninterrupted, and Fig. 3, accompanying this paper will show the limb as it is to-day. The tibia is now strong and well formed and the termination of the case is all that could be desired.

Fig. 3.



A FORMIDABLE CASE OF INJURY TO THE HAND, WITH RECOVERY.

It is seldom that a surgeon sees an injury of the character of the case detailed below, involving as it did, the crushing of the bones of the fingers, and, to a certain extent, of the hand, with severe laceration of all the soft parts, which were badly burned besides. It is still more infrequent that a case of this description recovers the use of the part involved, with or without more surgical interference than the simple dressing of the injury, and the care which it would naturally demand. This case illustrates forcibly also, the power of nature to recover from severe injury, without much deformity or impairment of the usefulness of the part.

Patrick C——, an Irishman, aged 44, while working in the factory of the New York Belting and Packing Company, of Sandy Hook, Ct., upon what is called a calendar machine, had his hand drawn between two heavy rolls and injured. These rolls weigh about two tons apiece, revolving only at a distance of a sixteenth of an inch from each other. The upper roll makes three revolutions to one of the under one. While in use, the rolls are filled with steam and heated anywhere from 80° to 200° Fahrenheit. At the time of the accident Mr. C. was running this machine for the purpose of spreading rubber over some cotton goods. His hand was carelessly resting on the under roll, when it was suddenly drawn in. After the machinery was stopped, which was very quickly done, he had to keep his hand where it was until the immense top roll was raised from its position and his hand pulled out, which occupied some moments. On my arrival I found, on examination, the following condition: The hand had been drawn into the machine in such a manner that the palm was turned upward, and, as a consequence, the dorsal surface was but little injured, owing to the fact that the lower roll was only a little warm at the time of the accident, and was going so slowly, but the palmar surfaces were fearfully la-

Fig 1.

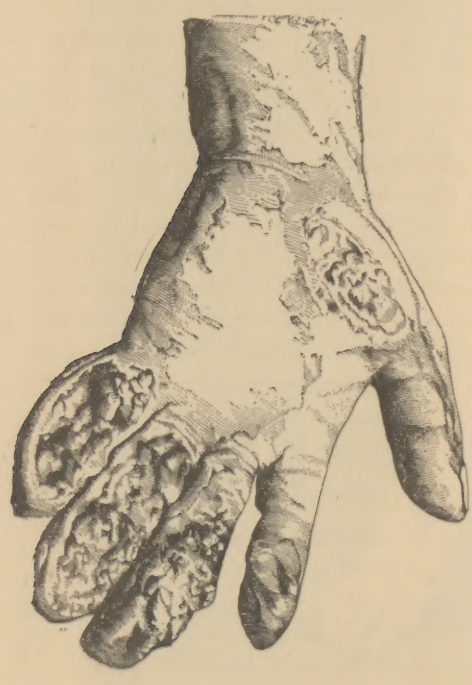
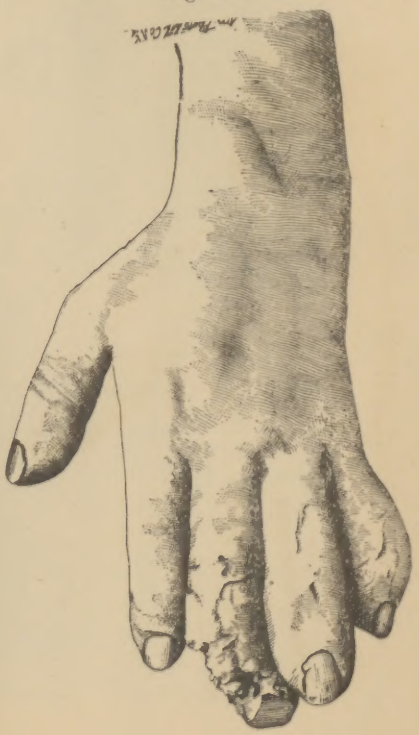
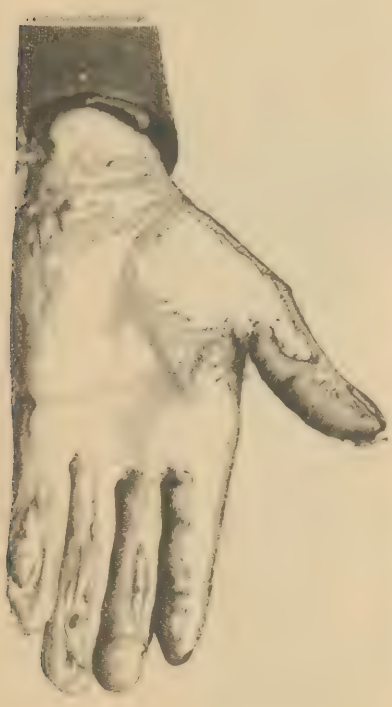


Fig. 2.



cerated and cooked, so that they were only, with the flesh adherent to them, about an eighth of an inch in thickness, the bones being badly crushed. I forgot to state that on examination I also found all the ligaments of the palmar surface were in view, and more or less cooked. The thumb was uninjured, save that it was badly burned. To make up, however, for the immunity of the thumb from injury, the second finger was terribly lacerated. It was not only badly crushed and cooked, but the end, as far as below the first joint, was literally torn off, hanging by a little strip of integument. I desired to remove this, but the objections raised by the family and the man himself, were so great that I was forced to desist, and put it together as well as I could. After drawing the parts well together, I dressed them with a solution of carbolic acid, (one part to forty), directing that it be applied fresh every fifteen minutes. The engravings, Figs. 1 and 2., will show the case (as it was ten days after the injury was received), in its palmar and dorsal aspects. The dressing was subsequently changed for an ointment of carbolic acid, made of 20 parts of cosmoline to 1 of the acid. In spite of the extent of his injuries, the man made a good recovery, having only two stiff fingers, (the second and third), the other two being almost as good as ever. The bones never recovered from the flattening process to which they were subjected, and to this day, (three years), are not more than three-sixteenths of an inch in thickness. Fig. 3 will show the result.

Fig. 3.



A UNIQUE CASE OF CONGENITAL DOUBLE TALIPES, VARO EQUINUS, OF THIRTY-THREE YEARS STANDING.

OPERATION.—PERFECT RECOVERY.

The subject of talipes is one of deep interest to the progressive surgeon, and any case which will give reliable clinical data, is eagerly sought after by him. I think the following case is so unique in many of its particulars, that I am constrained to put it on record for the benefit of science. As a rule, the operation of tenotomy for the relief of talipes, of even simple character in the adult, does not hold out great encouragement for definite results, and operations of this character are generally discouraged, except under certain circumstances, by leading orthopædic authorities in the text books upon this subject. In fact, it is rare to see an account of such cases, whether successful or unsuccessful, by even prominent operators. This fact, alone, would lead us to believe that it is not commonly performed; consequently, when the results gained in a case are so gratifying as in the one herein recorded, I think that it is my duty to present it, to be added to the quota of the unusual operations for the relief of this deformity.

Mrs. H——, a married woman, childless, 33 years old, came to me in the latter part of the month of February, 1878, and gave me the following history: She said that she was born with both feet deformed in the same degree, that she had as a child been nervous and delicate, and

of an extremely sensitive and retiring disposition. Being of a feeble constitution, unlike other children, it was a long time before she learned to walk, and when she did, she was only able to go a little way at a time without fatigue. This difficulty of walking continued, more or less up to the time when she first consulted me. A little extra work, or exertion, would cause the sensitive feet to become so sore, inflamed and tender, that she would have to poultice them, lying in bed for days at a time, in order that they might regain their normal condition. She also informed me that when she was nine years old, while crossing a rye field where the grain had been harvested, a large stubble penetrated one of her feet, (as she said the sole), cutting it badly. After the receipt of this accident, she was taken to her home and was confined to her bed with a badly swollen and exceedingly painful foot for several weeks. When she recovered, the position of the foot, to her surprise had greatly changed for the better, and commencing to use it in the natural way from this time, she after several months, succeeded in restoring it to its natural position. This was the left foot, and if you will consult Fig. 1., you will see that it presents a nearly normal condition. The piece of rye stubble which penetrated her foot, performed for this woman, what the surgeon would have done had he had the opportunity of operating. It is quite evident that the plantar fascia was cut and, probably, some of the tendons, releasing the foot from its position, and actually performing the operation of tenotomy. I think I can safely claim this as the first operation of this description, done in this manner, and by these means, for the State of Connecticut. On my examination of the patient I found her wearing a shoe shaped like a flat-iron. On the removal of the shoe I found a most exaggerated case of talipes varo-equinus, the worst I ever saw. The foot was frightfully distorted as shown in Fig. 1., and the callous spots which had formed on the lateral surfaces were inflamed and exceedingly painful. These patches of thickened skin were very large, and occu-

Fig. 1.

pied almost all of the external lateral surface of the foot. There was, also, considerable inflammation of the tissue surrounding these hardened places. After several days effort, I succeeded in reducing the inflammation, and making a careful examination of the foot, by applying the test of Dr. Sayre, of putting the ligaments upon the stretch and making pressure, I got as a result, a reflex spasm.

Acting upon Dr. Sayre's theory of this phenomenon, I advised the operation of tenotomy, as offering the only means of affording any degree of permanent relief. The woman in her then present condition, was disgusted with life. She did not take any comfort in walking or standing upon her feet, nor could she, without pain, perform any of the duties which devolved upon her, and which required the use of her feet.

She being a married woman in moderate circumstances, it was incumbent upon her to perform duties which compelled her to be a good deal upon her feet, and, as a result, her condition was miserable indeed. She eagerly grasped at the idea of the relief, which I told her I thought an operation would afford her. In suggesting the operation of tenotomy I felt sure that the case could not be made any worse than it was at this time, and the chances were good for a certain amount of relief, provided she was thorough in carrying out the treatment subsequent to the operation. She promising readily to do all in her power; on the 10th of March, the same year, assisted by Mr. Egan, a student in my office, I placed her under the influence of ether, divided the tendo Achilles and all of the plantar fascia, with some of the lateral ligaments and fascia. I then attempted to bring the foot round

Fig. 2.

to its normal condition, which I finally accomplished after severe effort, and the reduction of the dislocated tarsal bones. I then dressed the foot after Dr. Sayre's method, and no inflammation ensuing, I did not remove the dressings for two weeks. On their removal at the expiration of that time, I found a small spot which was inflamed, on the right lateral aspect of the foot, at the base of the little toe, produced, evidently, by the pressure of the bandage. The skin afterward sloughed, to the size of a twenty-cent piece. This sore, the only accident which happened from the beginning to the end of the case, was exceedingly obstinate in healing, owing largely to the debilitated condition of the patient. From this time on, massage and electricity were faithfully and assiduously applied for nearly two years, with the result of developing the muscles of the calf of the leg to a great degree, and also of strengthening and developing those of the foot. In about a month the patient was put in a shoe made for her by John Reynders & Co., New York City, which laced from the toes to high up above the ankle and which had an artificial muscle attached, (Barwell), to help the weakened muscles of the foot. This shoe as applied, will be seen in Fig. 2. At this time I had the great pleasure of showing the case to my esteemed friend, Dr. Lewis A. Sayre, of New York City, at that time on a visit to my house, who was greatly interested, and who gave valuable advice as to its subsequent care and treatment. From this time the case went on to uninterrupted recovery, though it was a long while before she could go without the muscle, and recovered the full use of the foot,—in all about two years; now, however, after a lapse of nearly six years, she can use it for every purpose that a good foot can be put to, and without undue fatigue. (See Fig. 3). She also dances on it and is able to walk fairly long distances. I think that in cases where the deformity was so great, the operation so severe, the patient so advanced in life, so good a result has rarely been obtained. I would add, also, that the woman is now in good health, it being vastly better than that which she had enjoyed before the operation.

Fig. 3.

A CASE OF GENU VALGUM IN THE ADULT. OPERATION.—CURE.

An operation for the relief of the deformity called "genu valgum," in the earlier years of life is not an uncommon surgical procedure, and has been performed many times both in this country and abroad. The result of the majority of these cases has been exceedingly good and the operation is quite popular among the surgeons of to-day. Surgical operations, however, for the relief of the knee in persons who have reached the age of 20 and upwards are rare, and the results obtained in many of the cases operated upon were not such as to lead to its general adoption. The cases of this deformity in the adult are also rare, and the opportunities of operating correspondingly few. In Europe it has been performed quite a number of times, and with moderate success, but in the United States I have failed to find a single case recorded which has been operated upon after the age of fifteen. Neither do I find any case in which the deformity has been removed in America by the method advocated in this paper, and which was performed with such excellent results. The age of the patient, the length of time the deformity had existed, the method of operating, the most excellent result, with the interesting history of the case, make it, I believe, a most important one to place upon record. The subject of knock-knee has caused more or less discussion during the last seven years, in fact, more than any other orthopædic condition, and the literature on the subject is enormous. The researches of Mikulicz, corroborated as they are by those of Tripler, Verneuil and Gueniot, show that the deformity is not due, primarily to any abnormal condition of the ligament, but to an unnatural shape of the bone, which consists chiefly of a projection of the internal condyle downward.

This, it is claimed, is the result, partly of a diapyphiseal curve, and an unequal bone-growth on the two sides of the diaphysis near the epyphiseal line, the weight of the body acting upon the change of axis produced, helps to complete the deformity. The contraction of the hamstrings, so often noticed, is not essential to the deformity, and is not a necessary factor of the same. It has, also, been shown by Ollier, that an irritation of the condyle will, alone, cause deformity of these parts. Mr. Brodhurst, however, does not consider the lengthening of the condyle as the cause of the deformity, but from my personal experience and the result of the advocacy of this opinion by Mikulicz and by the most prominent orthopedic surgeons of the day, I believe it to be the correct one. The mode of operating which was carried out in the case here reported originated with Mr. Ogston, of London, and which seems to me to be the best yet devised for adults.

Miss Susie C——, aged 33, American, single, school teacher, very stout, sixty-two inches in height, came to my office on the 7th day of September, 1883, and gave me the following history: When she was eleven months old she was taken ill with what was called chronic diarrhœa. At the time of the attack she was able to walk, and was considered a remarkably precocious and healthy child, well formed in every way. Her illness was a long one and it was nearly a year before she recovered from the diarrhœa. At this time she was very weak, and showed a decided aversion to standing up. When three years of age the family moved from North Carolina to Connecticut, and she was then no larger than a child of eighteen months. After her removal to Connecticut, she did not walk for nearly a year, but wanted to sit with the left foot under the body, and would cry if it was put down. The habit of sitting on the foot was kept up, almost unconsciously, until the operation was performed. When she arrived at the age of four years, she was put upon her feet, and after a little while was able to walk a short distance with the aid of a staff. It was at this time that the

inclination of the knee to turn, was noticed, but it was hoped that as strength was restored it would regain its natural position. This happy result did not occur, however; the limb grew no worse, and when she was nine years old she walked to school without any staff and without any apparent inconvenience. From this time until she was eighteen years old, she could walk even two or three miles with no more trouble from that limb than the other. At this time she passed an examination and became a teacher in one of the public schools of the State, walking a mile to the school house and back every day, besides being on her feet almost all the time at school. From 18 to 30, she could not walk so far, and began to notice a difference in the angle at the knee, which was also painful at times. When she arrived at the age of about 30, the hip began to ache, and as she described it, "as being accompanied with a numb, disagreeable feeling right in the joint," the spot seemed as if it could be covered with the finger. At this time, she also noticed when she walked further than usual, there would be a catch or cramp, which would prevent the step from being taken for a moment, when it would end and then return again after a time. It was at this time she came to consult me. I found her complaining of a severe pain at the ankle and hip joints, as well as a great deformity, as is shown in Fig. 1. As an example of pluck, I would incidentally mention here, that she had schooled herself to walk slowly and deliberately, and on her entering my office for the first time, I did not notice a bit of halt or limp in her gait, and was amazed at the extent of the deformity she displayed to me. In order to satisfy myself that the deception was perfect, I afterwards made her walk, and she did not make any sign that would indicate a deformity of any character whatever. As will be seen by the accompanying drawing the deformity was very great, but, even this does not show it to its full extent, owing to the position in which the picture was taken, to show the full elevation of the hip. The left knee completely lapped over the right one. The patella was entirely dislocated and rested over on the external condyle of the femur.

After a careful examination, I told her frankly, that I did not think any appliance would do her much good, and in order to get the desired relief, I believed a radical operation would be necessary. To this she decidedly objected, when I decided to put on the instrument shown in Fig. 2., and for this purpose I went with her to John Reynders & Co., the instrument makers, of New York City, where she was measured for the splint. While in the city at this time with her, I took her to Dr. L. A. Sayre's office, and showed the case to him. He said that it was a most unique one, and advised an operation, telling the patient the danger of a fracture in case of a fall, etc. After the splint had been tried faithfully for several months, with little if any relief, and the pain growing greater at the hip, knee and ankle, she finally decided to have the operation performed.

After a couple weeks of preparatory treatment, on the 4th day of June, at the Grand Central Hotel, Newtown, Conn., in the presence of Drs. J. J. Berry, of South Norwalk, Dr. S. T. De La Mater, of Bridgeport, and Dr. E. M. Smith, of Danbury, Conn., I performed the following operation: The patient having been placed under the influence of ether by Dr. Berry, I made an incision 1½ inches long, and 2½ inches above the inner condyle of the femur. This incision was carried down to the bone, its length—which may seem unnecessary,—was required, because the patient was so fleshy. A Hays' saw was then introduced into the wound and the work of sawing was commenced at the base of the condyle, the blade of the saw being protected by two retractors. After sawing as long as I could get the instrument to work, I took a chisel and with one or two blows of the mallet

Fig. 1.

Fig. 2.

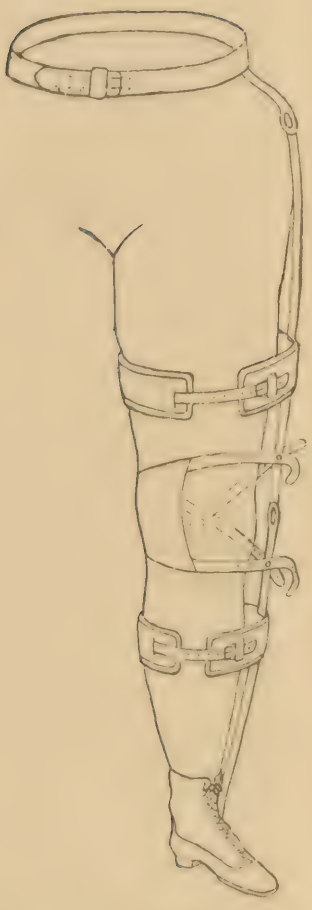
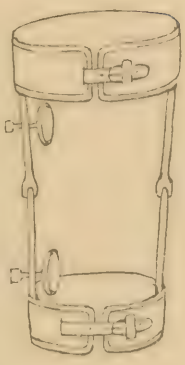


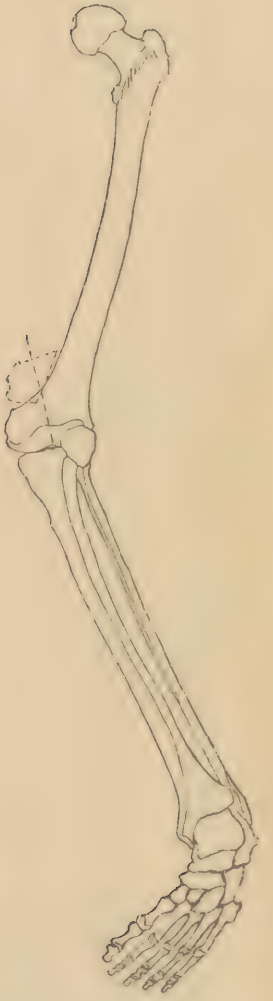
Fig. 4.



severed the condyle from its attachment. I then performed subcutaneous tenotomy of the external ham-string tendons. The constricting bands and contracting ligaments were also severed, and with but little effort the condyle was pushed up by the side of the shaft of the femur, and the limb was brought round to its natural position. The only accident that happened during the operation, was the cutting of the peroneal nerve, which runs close to the tendon of the biceps muscle.

Fig. 3. will give a fair idea of the case after the severing of the condyle, and just before the straightening of the limb took place, as well as the position the fragment occupied after the limb had been brought into place. The wound was then brought together with interrupted sutures, and dressed with antiseptic carbolized gauze dressing. A woolen stocking was then drawn over all, and a plaster of paris bandage carefully applied and allowed to harden while the limb was held in position. The operation occupied about an hour, and after the dressings were applied, the patient was put to bed and given half a grain of morphine hypodermically. The patient did unusually well after the vomiting from the effects of the ether had passed off; not an untoward symptom supervening from the day of the operation to the close of convalescence. A large drainage tube had been passed through the angles of the wound, which was then irrigated with a 1 to 40 carbolized solution twice and sometimes three times a day, till the first plaster bandage was removed,

Fig. 3.



two weeks and two days after the operation took place. On the removal of the dressings at this time the wound was found to have healed throughout its whole extent except where the drainage tube made entrance and exit. At this time the tube was removed, and the wound rapidly closed. At the end of another week, I put another plaster of paris dressing on, and allowed it to remain until the 11th day of July, when the little instrument illustrated in Fig. 4. was put on and the patient set upon her feet for the first time. In a few more days she had her crutches, and was walking about the halls of the hotel. On September 6th, she commenced teaching school again, at which occupation she has been steadily engaged ever since. At that time she could walk without any limp at all, if the steps were taken slowly, and the deformity was all removed, as will be seen by Fig. 5. I would not allow her, however, to go out of doors without her crutches all winter, for fear of an accident from a fall. Evidence of the union of the severed nerve was manifest at the end of two weeks, and the loss of sensation has entirely disappeared.

The ease with which an operation of this kind may be performed, and the chances of recovery which it offers, should render it more popular than it now is. If we may except the secondary changes sometimes following old deformities of this character, the conditions of recovery are equally good in both early and adult life. Even when such unpleasant features are present, as this case shows, an operation offers a good chance of relief, if not cure. I would say that I believe that this is the first time this operation has been performed upon the adult in this country.

SIMPLE CYST OF THE LEFT OVARY—WEIGHT, TWENTY-TWO POUNDS—OPERATION—RECOVERY.

Mrs. N——, aged 62, married, no children; consulted me December 27th, 1884, for an enlargement in the left side of the abdomen, which she had first noticed a month previously. At this time, the examination showed the tumor to be a simple cyst of the left ovary, of moderate size, as the circumference of the abdomen was but thirty-three inches. She appeared in excellent health and suffered but little pain or inconvenience. During the following month I referred her to Dr. T. Gaillard Thomas, of New York City, who confirmed my diagnosis.

I then decided to operate, and put the patient, for two weeks, upon preparatory treatment, which consisted of careful attention to the skin, kidneys and bowels.

Fig. 5.

Two grains of quinine were given three times a day, and general tonics, combined with Murdock's liquid food. For three days previous to the operation, the food consisted entirely of liquid nourishment and the raw foods as prepared by Murdock. Twelve hours before the operation occurred she received 15 grains of quinine.

The operation was performed February 23rd. There were present Drs. Henry, Porter, Berry, De La Mater, Hill, Young and Elliott. The patient was in excellent condition, and took the ether well. Every exertion was made to secure the best possible antiseptic surroundings. The room in which the operation was performed, and in which the patient afterwards remained, was most thoroughly disinfected. The floor scrubbed with carbolized water, the walls scraped, and the ceilings whitewashed with a disinfecting solution. During the operation, the temperature of the room was kept at 80°. Antiseptic precautions were taken by the operator and his assistants. The instruments were immersed in a 1 to 20 solution of carbolic acid, and the sponges were placed in a corrosive sublimate solution, 1 to 2,000. An incision, less than three inches in length, was made in the median line, between the pubes and umbilicus, and, the tissues having been divided down to the peritoneum, the latter was incised. By introducing a sound and passing it around the periphery of the tumor, the latter was found to be free from adhesions. The cyst was punctured with the trocar. I here found some difficulty in holding and retaining the collapsed cyst-wall in close apposition with the trocar and abdominal incision. To overcome this difficulty they were transfixed, on either side, with a large blanket-pin, (such as I show you). These were then handed to an assistant who was enabled to keep control of the cyst. The sack was now drawn through the abdominal incision, and the pedicle, being broad and of fair length, was transfixed and ligated with a strong double ligature of carbolized iron-dyed silk. It was then dropped into the abdominal cavity.

The latter having been thoroughly cleansed, the peritoneum and divided tissues were brought into apposition, and held with silver wire and pin sutures. The wound was dusted with iodoform, antiseptic gauze and cotton dressings were applied. Immediately after the operation, the temperature was 98°, and the pulse 94. The patient suffered very little from shock, and rallied well and promptly.

At 6 o'clock P. M., the temperature was 99.1°, and the pulse 96. I gave a hypodermic injection of a quarter of a grain of morphia, and an enema of 1 ounce of Murdock's liquid food; she passed water freely. After this, she slept and rested comfortably for several hours. February 24th, 1 A. M., an enema of Murdock's food was given. From this time until 3:30 A. M., she rested quietly. Six A. M., temperature 100°, pulse 90. Three P. M., temperature 100.5°, pulse 114. The patient passed a comfortable day; took several enemata of Murdock's liquid food, and one of milk and brandy, which, not being well retained, was abandoned, and from this time out, nothing but Murdock's liquid food was used. Ice, by the mouth, *ad libitum*, with an occasional small dose of brandy. Passed water several times during the day.

February 25th, 6 A. M., has rested splendidly all night; has taken brandy and ice at frequent intervals; has had no vomiting or gastric disturbances.

February 26th, 6 A. M., pulse 98, temperature 98.2°; feels first rate and clamors loudly for food; no soreness, no tympanitis. Gave her a teaspoonful of beef peptonoids, and teaspoonful doses of liquid food at intervals during the forenoon. At noon she had two oysters and a small piece of toast. Six P. M., temperature 100.2°, pulse 98; took $\frac{1}{4}$ of a grain of morphia hypodermically, to allay restlessness.

February 27th, 6 A. M., temperature

100°, pulse 90. She has taken the usual enemata, and in addition small quantities of liquid food, liquid broth, brandy and peptonoids. Has had very little pain and has rested well.

February 28th, 6 A. M., pulse 86, temperature 99.5°. March 1st, 8 A. M., pulse 84, temperature 99°. March 2nd, 6 A. M., pulse 78, temperature 98.7°. On March 3rd, the eighth day from the operation, all the sutures were removed, and the wound was found to have healed by first intention.

On the fourteenth day she sat up in bed, and on the 21st, when my last visit was made, she went into the dining room to dinner. It will be noticed that the nourishment which the patient took for the first three days after the operation consisted entirely of enemata of Murdock's Liquid Food, and, also that for the first week it was the principal diet. I consider that it rendered me the most valuable service in sustaining life in this case, as it has in many others, in which I have used it.

FIBRO-CYSTIC TUMOR OF THE RIGHT OVARY—OPERATION—DEATH THE FIFTH DAY.

Mrs. J——, American, married, mother of six children, consulted me for the first time in September, 1884, seeking relief from a bunch in her right side, which she had noticed only a few months previously.

Examination revealed the existence of a round globular tumor in the right iliac fossa, which was about the size of an orange, of smooth outline and clearly movable. As there was no history of rapid growth, I advised a few weeks delay for further observation. During the next six months I saw her frequently and noticed that the tumor was growing rapidly. At the end of this time, Drs. De La Mater and Berry, at my suggestion, saw and examined the patient. The woman was then in fair condition though her health had deteriorated somewhat during the last few months. The tumor was found on examination to be about the size of a child's head, it lay deeply in the right iliac fossa and probably within the abdominal cavity. It seemed to have no direct connection with the uterus and moved freely from side to side. It appeared to the touch nearly round in shape and of firm texture. The contour was a little irregular. No fluctuating points could be detected. The examination resulted in a diagnosis of fibro-cystic tumor of the right ovary and an operation was deemed advisable as soon as possible. The consent of the patient to surgical interference having been obtained, she was put upon a ten days course of preparatory treatment, this being similar in character to that employed in the preceding case. The operation was performed March 26th, 1885, there being present Drs. Porter, Downs, Berry, Leighton, Andrews and Smith. The usual antiseptic precautions as to the surroundings, instruments, dressing, etc., were taken. A carbolized spray was furnished by an Esmarch apparatus which did most excellent work. During the operation the room was kept at a temperature of 83° Fahrenheit. One of the chief points of interest in this case relates to the shape of the incision which was unusual. Before touching the knife I had determined that, if an auxilliary transverse incision offered any advantage at all, in the removal of such a hard non-compressible tumor as I believed this to be, I should not hesitate to prefer it to a very long median section.

On exposing the growth by a short exploratory incision, it proved to be largely fibrous and of very firm texture with multiple cysts so distributed that an attempt to evacuate would have occasioned considerable loss of time and a risk of contaminating the peritoneal cavity. I therefore made a transverse cut from the umbilicus obliquely four inches toward the crest of the ilium. These two incisions resulted in an angular flap which on

Fig. 1.

being turned back gave me every facility for the extirpation of the tumor. The hemorrhage produced by this cross section of the muscles was but very trifling, causing hardly a moment's delay. Through the opening thus made the tumor was easily drawn and the pedicle, which was long, having been transfixed and tied with a double ligature of iron-dyed silk, was returned into the abdominal cavity. The viscera were retained by means of a large elephant's ear sponge and by warm carbolized cloths. In this case, as well as in the one reported above, one of the benefits of a thorough preparatory treatment was shown by the absence of gaseous and solid material in the intestines. The peritoneal cavity having been thoroughly cleansed, the edges of the wound were brought together and secured by ten wire sutures and twelve wire hair pins. The wound itself was then covered with iodoform, carbolized gauze and cotton, the whole being secured by a tightly applied abdominal bandage. The duration of the operation was about fifty minutes. The patient recovered promptly from the ether and gave evidence of very little shock. At 6 P. M., four hours after the operation, the pulse was 96 and the temperature 98.7° (ninety-eight and seven tenths). She passed a fairly comfortable night, had some pain, and vomited occasionally. For this she received morphia hypodermically, cracked ice and champagne. The peculiarity of her symptoms and general condition the morning following the operation, led me to suspect that she was addicted to the use of opium. Upon questioning her, I found that this was so and that for the past few years she had been consuming large quantities of the drug, a fact which was a most unwelcome one to me, as it is said to reduce the chances of life in this class of operations fully one-half and had I known it before the operation was performed I doubt very much if I would have consented to do it. The patient informed me when I question-

Fig. 2.

ed her as to why she did not let me know this before, that she was afraid that if I had been aware of it, I would not have performed the operation, and that she did not want to live in this condition any longer. March 27th, 6 A. M., temperature 99°, pulse 98. Slept a part of the night, but was quite restless at the time and required exceedingly large doses of the morphine. Vomited several times. Has taken Murdock's Food, brandy, champagne and beef peptonoids. 6 P. M. temperature 99.5° (ninety-nine and one-half), pulse 102. Has been restless and complains of some tenderness and pain in the abdomen. Vomiting still persists. Stimulants increased and still larger doses of morphine administered.

March 29th, 6 A. M., temperature 102°, pulse 138. Has had a bad night, shows distinct evidences of peritonitis, which grew more and more marked during the day. Toward night a higher temperature, followed by a delirium. Pulse 160, temperature 105.5°, (one hundred and five and one-half). Quinine in thirty grain doses was given per rectum every four hours, morphia pushed to the point of tolerance, with all the stimulants which she could take—brandy, champagne and carbonate of ammonia; but in spite of every effort, and constant attendance on my part, for two days and two nights, she rapidly sank and died at 6 P. M., Monday March 30th, having lived six hours on the fifth day from the operation.

Twelve hours after death, I made a post mortem examination of the wound, which showed that it had healed by first intention, throughout. Over the peritoneal surface, there was perfect coäptation and no unusual degree of inflammatory action. The peritoneal cavity contained about a pint of dark colored serum. The area of peritonitis was about five inches in diameter, and was confined to the tissues around the pedicle. The accompanying cut, Fig. 1. shows the character of the incision, while the dotted lines show the different positions of the tumor during the various stages of the operation.

Figure 2 shows the wound after the completion of the operation, and the application of the sutures. Figure 3. represents a side view of the tumor with ovary attached. Figure 4., the same from an end view. I have the pleasure, also, of presenting this specimen for your inspection. It weighed five pounds, four ounces, half of which were the fluid con-

Fig. 3.

tents of the cyst. It is of the mixed variety, over three-fourths being of a dense fibrous character, the remainder being cystic.

The last portion was, evidently, of later growth, and its walls were extremely tense and thin. Distributed throughout the fibrous portion were numerous minute cysts, in progress of growth. Its origin was, manifestly, in the ovary and broad ligament.

In the future, if I have an opportunity to remove tumors of this character, I shall not hesitate to use the transverse incision. The great ease and facility with which the operator is enabled to manipulate the diseased mass, and remove it through such an incision, can only be estimated by those who have had much experience in abdominal surgery, and have ventured to perform like operations by the old central incision. I am, also, firmly of the opinion that, had this woman been free from the debilitating influences of the long-continued and liberal use of opium, she would have recovered.

This case, gentlemen, is the last of a series of nine ovariotomies, which I have performed, six of which have been successful.

Fig. 4.

GOULD & STILES—BOOK AND JOB PRINTERS,
Bridgeport, Conn.